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An Analysis of GRB 070110 GABRIELLE SLOANE<sup>1</sup>, The Evergreen State College — The Gamma Ray Burst 070110 has an unusual X-ray afterglow light curve, with an extremely flat section between the initial and final decay periods with some flaring. The optical afterglow was also unusually long-lasting. It is a long burst (more than 2s), pointing to a collapsing very massive star as progenitor. However, the afterglow does not coincide with typical light curves (very steep, then shallow followed by increasing decay) seen in most long GRBs and corresponding to an immediate collapse by the progenitor into a black hole. Using available data, I analyze this burst source and propose various scenarios that might lead to the observed afterglow.

<sup>1</sup>Undergraduate Research

Gabrielle Sloane The Evergreen State College

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